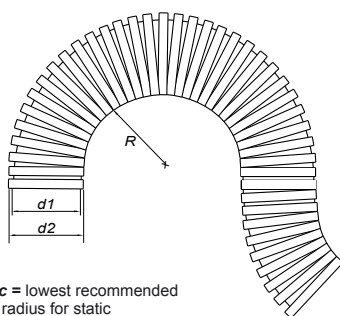


LHR is a highly flexible polyamide 12 conduit and is formulated specifically for flexibility, fatigue strength and exceptional abrasion resistance. This conduit is ideal for motion intensive applications such as automation and robotics as well as pneumatic and hydraulic actuators.

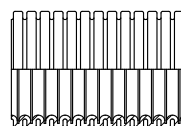


- High-grade, specially formulated polyamide 12
- Halogens and cadmium free
- Good weather and UV resistance
- Enhanced flexibility
- Excellent fatigue strength
- Enhanced abrasion resistance
- Good mechanical characteristics
- Temperature range: -50°C(-58°F) to 95°C(203°F)
- Short-term to 150 °C(302°F)

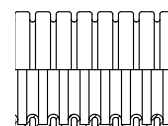


**Rs static** = lowest recommended bending radius for static (fixed) installation

**Rd dynamic** = lowest recommended bending radius for dynamic (flexible) installation



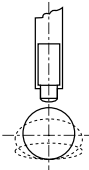
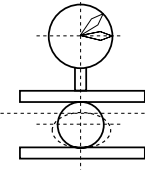
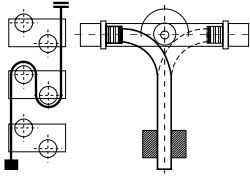
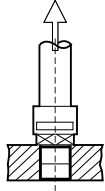
Fine Profile F  
Tight bend radius



Coarse Profile C  
High pull-out strength

Specifications are subject to change without notice

Order No.	Conduit Size		Trade Size		d1		d2		Rs Static		Rd Dynamic		PU	
	NW	mm	in	mm	in	mm	in	mm	in	mm	in	m	ft	
LHR-FK07.50	7	10	1/4	6.2	0.24	10.0	0.39	15.0	0.59	40.0	1.57	50	164.0	
LHR-FK10.50	10	12	5/16	9.6	0.38	13.0	0.51	20.0	0.79	50.0	1.97	50	164.0	
LHR-FK12.50	12	16	3/8	11.9	0.47	15.8	0.62	25.0	0.98	65.0	2.56	50	164.0	
LHR-FK17.50	17	20	1/2	16.4	0.65	21.2	0.83	30.0	1.18	65.0	2.56	50	164.0	
LHR-FK23.50	23	25	3/4	22.6	0.89	28.5	1.12	35.0	1.38	90.0	3.54	50	164.0	
LHR-FK29.50	29	32	1	29.0	1.14	34.5	1.36	45.0	1.77	110.0	4.33	50	164.0	
LHR-FK36.30	36	40	1-1/4	36.5	1.44	42.5	1.67	60.0	2.36	165.0	6.50	30	98.4	
LHR-FK48.30	48	50	1-1/2	47.5	1.87	54.5	2.15	70.0	2.76	180.0	7.09	30	98.4	
LHR-CK17.50	17	20	1/2	15.2	0.6	21.2	0.83	30.0	1.18	80.0	3.15	50	164.0	
LHR-CK23.50	23	25	3/4	21.7	0.85	28.5	1.12	40.0	1.57	100.0	3.94	50	164.0	
LHR-CK29.50	29	32	1	27.4	1.08	34.5	1.36	50.0	1.97	120.0	4.72	50	164.0	
LHR-CK36.30	36	40	1-1/4	35.8	1.41	42.5	1.67	60.0	2.36	180.0	7.09	30	98.4	
LHR-CK48.30	48	50	1-1/2	46.7	1.84	54.5	2.15	70.0	2.76	200.0	7.87	30	98.4	
LHR-CK56.30	56	68	2	56.0	2.2	67.2	2.65	110.0	4.33	270.0	10.63	30	98.4	
LHR-CK70.10	70	80	2-1/2-3	67.2	2.65	80.0	3.15	150.0	5.91	350.0	13.78	10	32.8	
LHR-CK70.30	70	80	2-1/2-3	67.2	2.65	80.0	3.15	150.0	5.91	350.0	13.78	30	98.4	
LHR-CK95.10	95	106	3-1/2-4	91.3	3.59	106.0	4.17	170.0	6.69	450.0	17.72	10	32.8	
LHR-CK95.30	95	106	3-1/2-4	91.3	3.59	106.0	4.17	170.0	6.69	450.0	17.72	30	98.4	

MECHANICAL CHARACTERISTICS	STANDARD REFERENCE	METHOD OF TESTING		VALUES			UNIT
Impact Strength	IEC EN 61386	<p>The Conduit is impacted with a spherical object weighing 2 kg and having a 300 mm radius. The height of the drop is equal to 1.2 meters.</p>		> 1/ [2] (-45°C)			J / Class
				> 6/ [4] (-15°C)			J / Class
				> 20/ [5] (23°C)			J / Class
Compression Strength	20% / 2 min.	<p>The Conduit is compressed with a 100 mm steel plate for a period of time, reducing the conduit diameter by 25%.</p>		Compression Force	Under Load Deformation	Deformation Residual	N / Class
<i>Tested with conduit:</i>							
LHR-FK12.50	Internal Method			≥ 130 N	2.4 mm	3%	N 50x50 mm
LHR-CK29.50				≥ 240 N	5.8 mm	2%	N 50x50 mm
LHR-CK48.30		≥ 110 N	9.6 mm	2%	N 50x50 mm		
Fatigue Strength	23°C / 50% r.h.	<p>The Conduit is continuously subjected to horizontal and vertical movements. The full movements are counted.</p>		≥ 10,000,000.00			Cycles at 23°C
	Internal Method						
Pull-Out Strength	23°C / 50% r.h.	<p>The Conduit with the respective connector is subjected to increasing pull-out strength until test uncouples.</p>		Pulling Force	Residual Elongation	N / Class	
<i>Tested with Grip Lock Fitting:</i>							
K8-M-S-12P11				Internal Method	≥ 160 N		4%
K8-M-S-29P29					≥ 540 N		10%
K8-M-S-48P48	≥ 900 N	10%					
THERMAL CHARACTERISTICS		VALUES			UNIT		
Operating Temperature		-50°C to +95°C			Celsius		
Short Period of time	110°C		20,000 hours				
	150°C		168 hours				
FIRE CHARACTERISTICS		STANDARD REFERENCE		VALUES	UNIT		
Oxygen Index		EN ISO 4589-1		≥ 28	%		
Halogens Contents		DIN 53474		FREE			
Flame Class		UL94		V2			
Self-Extinguishing		IEC EN 61386		YES			
Glowing Flammability Index		EN 60695-2-10		850°C	Celsius		
WEATHERING RESISTANCE		STANDARD REFERENCE		VALUES			
Weathering UV/ Rain Cycle				VERY GOOD			
UV Aging		ISO 4892 -2		≥ 2,000 hours			
CHEMICAL PROPERTIES				VALUES			
Resistance against fuel, mineral based oils, grease, alkalis & weak acids				GOOD			
ENVIRONMENTAL PROPERTIES		STANDARD REFERENCE		VALUES			
ROHS Compliant		EU Directive 2002 / 95 / EC		YES			
Recyclable				YES			
UV Resistant				YES			